

Subt. For, PTO-1449

Docket Number
112.020.122Application Number
09/915,093INFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Brent M. Segal et al.

Filing Date

July 25, 2001

Group Art Unit


Sheet

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OF

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U.S. Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,346,683	09/13/94	Green et al.	423	447.2	
	5,424,054	06/13/95	Bethune et al.	423	447.2	
	5,456,986	10/10/95	Majetich et al.	428	403	
	5,482,601	01/09/96	Ohshima et al.	204	173	
	5,547,748	08/20/96	Ruoff et al.	428	323	
	5,626,812	05/06/97	Ebbesen et al.	264	248	
	5,716,708	02/10/98	Lagow	428	408	
	5,753,088	06/19/98	Oik	204	173	
	5,780,101	07/14/98	Nolan et al.	427	216	
	5,903,010	05/11/99	Flory et al.	257	24	
	5,925,465	07/20/99	Ebbesen et al.	428	408	
	5,928,450	07/27/99	Russell	156	169	
	5,946,930	09/07/99	Anthony	62	293	
	5,973,444	10/26/99	Xu et al.	313	309	
	5,985,446	11/16/99	Lagow	428	367	
	5,993,697	11/30/99	Cohen et al.	252	502	
	6,031,711	02/29/00	Tennent et al.	361	303	
	6,060,724	05/09/00	Flory et al.	257	24	
	6,063,243	05/16/00	Zettl et al.	204	164	
	6,083,624	07/04/00	Hiura	428	408	
	6,105,381	08/22/00	Ghoshal	62	259.2	
	6,136,160	10/24/00	Hrkut et al.	204	192.16	
	6,146,227	11/14/00	Mancevski	445	24	
	6,156,256	12/05/00	Kennel	264	461	
	6,183,714 B1	02/06/00	Smalley et al.	423	447.3	
	6,203,814 B1	03/20/01	Fisher et al.	424	443	
	6,203,864 B1	03/20/01	Zhang et al.	427	592	
	6,221,330 B1	04/24/01	Moy et al.	423	447.3	
	6,231,744 B1	05/15/01	Ying et al.	205	324	
	6,231,980 B1	05/15/01	Cohen et al.	428	402	
	6,232,706 B1	05/15/01	Dai et al.	313	309	
	6,239,547 B1	05/29/01	Uemura et al.	313	495	

EXAMINER



DATE CONSIDERED

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5,196,396	03/23/93	Lieber	505	1	
5,252,835	10/12/93	Lieber et al.	250	492.1	
5,840,435	11/24/98	Lieber et al.	428	698	
5,897,945	04/27/99	Lieber et al.	428	323	
5,997,832	12/07/99	Lieber et al.	423	249	
6,036,774	03/14/00	Lieber et al.	117	105	
6,159,742	12/12/00	Lieber et al.	436	164	
6,190,634 B1	02/20/01	Lieber et al.	423	439	
5,590,078	12/31/96	Chatter	365	189.01	
5,799,209	08/25/98	Chatter	395	876	
5,838,165	11/17/98	Chatter	326	38	
6,108,725	08/22/00	Chatter	710	56	
6,138,219	10/24/00	Soman et al.	711	149	
6,212,597 B1	04/3/01	Conlin et al.	711	105	
6,237,130 B1	05/22/01	Soman et al.	716	10	
4,853,893	08/01/89	Eaton, Jr. et al.	365	145	
4,888,630	12/19/89	Paterson	357	23.5	
5,198,994	03/30/93	Natori	365	145	
5,444,421	08/22/95	Carroll et al.	331	111	
5,479,172	12/26/95	Smith et al.	342	51	
5,517,194	05/14/96	Carroll et al.	342	50	
5,521,602	05/28/96	Carroll et al.	342	50	
5,533,061	07/02/96	Smith et al.	375	334	
5,553,099	09/03/96	Carroll et al.	375	334	
5,608,246	03/04/97	Yeager et al.	257	295	
5,626,670	05/06/97	Varshney et al.	117	7	
5,802,583	09/01/98	Yeager et al.	711	152	
5,850,089	12/15/98	Varshney et al.	257	295	
5,850,231	12/15/98	Orimoto et al.	345	507	
5,909,624	06/01/99	Yeager et al.	438	396	
6,025,618	02/15/00	Chen	257	295	
6,044,008	03/28/00	Choi	365	145	
6,128,214	10/03/00	Kuekes et al.	365	151	
6,159,620	12/12/00	Heath et al.	428	615	

EXAMINER

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6

6,198,655 B1	03/06/01	Heath et al.	365	151	
5,198,390	03/30/93	MacDonald et al.	437	203	
5,316,979	05/31/94	MacDonald et al.	437	203	
5,426,070	06/20/95	Shaw et al.	437	203	
5,640,133	06/17/97	MacDonald et al.	333	197	
5,719,073	02/17/98	Shaw et al.	437	228	
5,846,849	12/08/98	Shaw et al.	438	52	
5,847,454	12/08/98	Shaw et al.	257	734	
5,878,840	03/09/99	Tessum et al.	182	229	
5,914,553	06/22/99	Adams et al.	310	309	
5,939,785	08/17/99	Klonis et al.	257	729	
6,051,866	04/18/00	Shaw et al.	257	417	
6,259,277 B1	07/10/01	Tour et al.	326	136	
5,640,343	06/17/97	Gallagher et al.	365	171	
5,650,958	06/22/97	Gallagher et al.	365	173	
5,793,697	08/11/98	Scheuerlein	365	230.07	
5,841,692	11/24/98	Gallagher et al.	365	173	
5,930,164	07/27/99	Zhu	365	158	
5,946,228	08/31/99	Abraham et al.	365	173	
6,052,263	04/18/00	Gill	360	113	
6,072,718	06/06/00	Abraham et al.	365	173	
6,104,633	08/15/00	Abraham et al.	365	171	
6,166,948	12/26/00	Parkin et al.	365	173	
6,219,212 B1	04/17/01	Gill et al.	360	324.2	
4,701,842	10/20/87	Olnowich	364	200	
4,985,871	01/15/91	Catlin	365	230.06	
5,161,218	11/03/92	Catlin	395	425	
5,184,320	02/02/93	Dye	365	49	
5,412,785	05/02/95	Skruhak et al.	395	375	
5,586,286	12/17/96	Santeler et al.	395	432	
5,608,888	03/04/97	Purcell et al.	395	412	
5,623,638	04/22/97	Andrade	395	494	
5,651,126	07/22/97	Bailey et al.	395	401	
5,652,856	07/29/97	Santeler et al.	395	432	

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5,699,317	12/16/97	Sartore et al.	365	230.06	
5,271,862	02/24/98	Sartore et al.	395	445	
5,781,717	07/14/98	Wu et al.	395	182.06	
5,875,451	02/23/99	Joseph	711	105	
5,887,272	03/23/99	Sartore et al.	711	105	
6,038,637	03/14/00	Berube et al.	711	105	
6,049,856	04/11/00	Bolyn	711	168	
6,088,760	07/11/00	Walker et al.	711	104	
6,226,722 B1	05/01/01	Shippy et al.	711	168	
6,233,665 B1	05/15/01	Bolyn	711	168	
5,444,651	08/22/95	Yamamoto et al.	365	108	
6,031,756	02/29/00	Gimzewski et al.	365	151	
3,448,302	06/03/69	Shanefield	307	318	
4,845,533	07/04/89	Pryor et al.	357	2	
4,876,667	10/24/89	Ross et al.	365	113	

Foreign Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	0 613 130 A1	08/31/94	EP				
	0 665 187 A1	08/02/95	EP				
	0 665 187 B1	12/29/97	EP				
	0 989 579 A3	03/29/00	EP				
	0 945 402 A1	09/29/00	EP				
	0 947 466 A1	10/06/99	EP				
	0 989 579 A3	03/29/00	EP				
	1 046 613 A2	10/25/00	EP				
	1 052 520 A1	11/15/00	EP				
	1 054 249 A1	11/22/00	EP				
	1 059 266 A3	12/20/00	EP				
	1 061 040 A1	12/20/00	EP				
	1 061 043 A1	12/20/00	EP				
	1 061 044 A1	12/20/00	EP				
	1 061 544 A1	12/20/00	EP				
	1 061 555 A1	12/20/00	EP				

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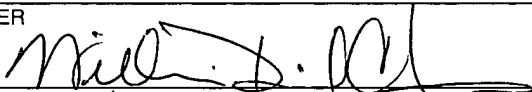
1 069 206 A2	01/17/01	EP			
1 072 693 A1	01/31/01	EP			
1 100 106 A2	05/16/01	EP			
1 100 297 A2	05/16/01	EP			
WO 96/38410	12/05/96	PCT			
WO 97/09272	03/13/97	PCT			
WO 97/43473	11/20/97	PCT			
WO 98/26871	06/25/98	PCT			
WO 98/39250	09/11/98	PCT			
WO 98/48456	10/29/98	PCT			
WO 99/06618	02/11/99	PCT			
WO 99/47570	09/23/99	PCT			
WO 99/48810	09/30/99	PCT			
WO 99/58748	11/18/99	PCT			
WO 99/65821	12/23/99	PCT			
WO 01/03208	01/11/01	PCT			
WO 95/02709	01/26/95	PCT			
WO 95/02709	01/26/95	PCT			
WO 96/41043	12/19/96	PCT			
WO 97/31139	08/28/97	PCT			
WO 98/39251	09/11/98	PCT			
0 688 618 A2	08/23/95	EP			
0 688 618 A3	08/23/95	EP			
WO 00/44094	07/27/00	PCT			
0 217 023 A2	04/08/87	EPO			
0 269 225 A2	06/01/88	EPO			
0 269 225 A3	06/01/88	EPO			
0 269 716 A2	12/28/88	EPO			
0 296 716 A3	12/28/88	EPO			
0 315 392 A2	05/10/89	EPO			
0 315 392 A3	05/10/89	EPO			

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

A1

Winslow, Troy. "Advanced+ Boot Block World's First 0.18-Micron Flash Memory." Flash Products Group. April 17,

EXAMINER



DATE CONSIDERED

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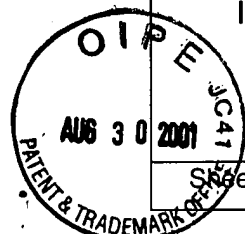
Group Art Unit

Sheet

6

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6



		2000.
A2		"Double Sided 4Mb SRAM Coupled Cap PBGA Card Assembly Guide." International Business Machines Corp. (IBM), 1998.
A3		Tyagi <i>et al.</i> "A 130nm Generation Logic Technology Featuring 70nm Transistors, Dual Vt Transistors and 6 Layers of Cu Interconnects." Portland Technology Development.
A4		"Preliminary: 8Mb (256Kx36 & 512Kx18) and 4Mb (128Kx36 & 256Kx18) [IBM0418A8CBLBB, IBM0418A4CBLBB, IBM0436A8CBLBB, IBM0436A4CBLBB]." International Business Machines Corp. (IBM), 1998.
A5		Wei, Chengyu <i>et al.</i> "Temperature and Stain-Rate Dependent Plastic Deformation of Carbon Nanotube."
A6		"Package Mechanicals for USAR ICs." USAR Systems, Inc., 1998.
A7		Dipert, Brian. "Exotic Memories, Diverse Approaches." EDN Magazine. April 26, 2001, 56-70.
A8		Duan, Xiangfeng. "Indium Phosphide Nanowires as Building Blocks for Nanoscale Electronic and Optoelectronic Devices." Nature (2001); 409: 66-69.
A9		Yang. "A High Performance 180 nm Generation Logic Technology." Portland Technology Development.
A10		Dai, Hongjie. "Controlled Chemical Routes to Nanotube Architectures, Physics, and Devices." The Journal of Physical Chemistry B (1999); 103: 11246-11255.
A14		Callaby, D. Roy <i>et al.</i> "Solid State Memory Study Final Report." National Media Lab, Feb. 1994.
A15		Cui, Yi. "Doping and Electrical Transport in Silicon Nanowires." The Journal of Physical Chemistry B (2000); Vol. 104, No. 22: 5213-5216.
B16		Li, Mingtao <i>et al.</i> "Direct Three-dimensional Patterning Using Nanoimprint Lithography." <i>Applied Physics Letters</i> (2000); Vol. 78, No. 21: 3322-3324.
B17		"8 Mb Synchronous Communication SRAM (IBM0418A86LQKA, IBM0418A86SQKA, IBM0436A86IQKA, IBM0436A86SQA)." International Business Machines Corp. (IBM), 1999.
B18		Dipert, Brian. "Memory Cards: Designing with a Full Deck." EDN Magazine. May 25, 2000.
B19		Schönenberger, Christian <i>et al.</i> "Physics of Multiwall Carbon Nanotubes." <i>Physics World</i> . April 4, 2000.
B20		Whatmore, Roger W. "Nanotechnology." <i>Ingenia</i> . February, 2000.
B21		"Nanochip NC800SX, 0.8 Gbyte Molecular Memory IC (R/W), Nanochip NC200SX, 0.2 Gbyte Molecular Memory IC (R/W), Nanochip NCM4510SX, Molecular Array Read/write Engine, Low Voltage Thermal Actuated, Dynamic Media Series M2, Nanochip NC4525DX, A/D-D/A Interface, Preliminary Specifications, Advance Information, (C) 1996-2000 Nanochip Document NCM2230500."
B22		Odom, Teri Wang <i>et al.</i> "Atomic Structure and Electronic Properties of Single-Walled Carbon Nanotubes." <i>Nature</i> (1998); 391: 62-64.
B23		Ouyang, Min. "Atomically Resolved Single-Walled Carbon Nanotube Intramolecular Junctions." <i>Science</i> (2001); 291: 97-100.
B24		Odom, Teri Wang <i>et al.</i> "Magnetic Clusters on Single-Walled Carbon Nanotubes: The Kondo Effect in a One-Dimensional Host." <i>Science</i> (2000); 290: 1549-1552.
B25		Wong, Eric <i>et al.</i> "Nanobeam Mechanics: Elasticity, Strength, and Toughness of Nanorods and Nanotubes." <i>Science</i> (1997); 277: 1971-1975.
B26		Hu, Jiangtao <i>et al.</i> "Controlled Growth and Electrical Properties of Heterojunctions of Carbon Nanotubes and Silicon Nanowires." <i>Nature</i> (1999); 399: 48-51.
B27		Rueckes, Thomas <i>et al.</i> "Carbon Nanotube-Based Nonvolatile Random Access Memory for Molecular Computing." <i>Science</i> (2000); 289: 94-7.
B28		Kim, Philip <i>et al.</i> "Nanotube Nanotweezers." <i>Science</i> (1999); 286: 2148-2150.
B29		Huang, Yu <i>et al.</i> "Directed Assembly of One-Dimensional Nanostructures into Functional Networks." <i>Science</i> (2001); 291: 630-33.
B30		Cui, Yi <i>et al.</i> "Functional Nanoscale Electronic Devices Assembled Using Silicon Nanowire Building Blocks." <i>Science</i> (2001); 291: 851-53.
B31		Oullette, Jennifer. "Exploiting Molecular Self-Assembly." <i>The Industrial Physicist</i> . American Institute of Physics, December 2000.
B32		Peng, Shu <i>et al.</i> "Chemical Control of Nanotube Electronics." <i>Nanotechnology</i> (2000); 11: 57-60.
B33		"The Ultimate Memory Guide." Kingston Technology (1998).
B34		Morales, Alfredo <i>et al.</i> "A Laser Ablation Method for the Synthesis of Crystalline Semiconductor Nanowires." <i>Science</i> (1998); 279: 208-11.

EXAMINER

DATE CONSIDERED

9/14/03

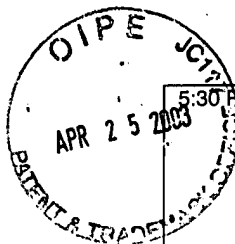
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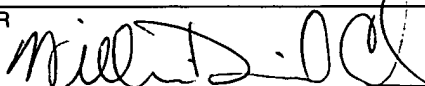
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				Filing Date 07/25/01		Group Art Unit 1775	
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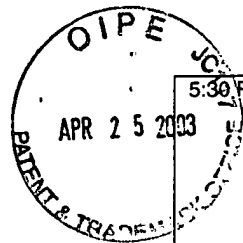
U.S. Patent Documents						
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	3,740,494	06/19/73	Dunand et al.			
	4,524,431	06/18/85	Haken et al.			
	3,892,890	07/01/75	Watanabe et al.			
	4,694,427	09/15/87	Miyamoto et al.			
	4,819,212	04/04/89	Nakai et al.			
	4,853,893	08/01/89	Eaton, Jr. et al.			
	4,888,630	12/19/89	Paterson			
	4,947,226	08/07/90	Huang et al.			
	4,979,149	12/18/90	Popovic et al.			
	5,031,145	07/09/91	Lever			
	5,051,956	09/24/91	Burns			
	5,198,994	03/30/93	Natori			

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Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/08650	08/03/99	PCT				
	WO 00/09443	07/02/99	PCT				
	WO 00/63115	04/14/00	PCT				
	WO 00/73204	05/25/00	PCT				
	WO 01/03208	06/30/00	PCT				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A1	Tans, Sander J., "Room-temperature transistor based on a single carbon nanotube," Nature, May 1998, Vol. 393, pages 49-52
	A2	Dillon, Anne C., "A Simple and Complete Purification of Single-Walled Carbon Nanotube Materials," Advanced Materials, 1999, Vol. 11, pgs. 1354-1358
	A3	Cleland, A.N., "Single-crystal aluminum nitride nanomechanical resonators," Applied Physics Letters, September 24, 2001, Vol. 79, pgs. 2070-2072
	A4	Ramsperger, U., "Fabrication and lateral electronic transport measurements of gold nanowires," Applied Physics Letters, January 1, 2001, Vol. 78, pgs. 85-87
	A5	Calleja, M., "Fabrication of gold nanowires on insulating substrates by field-induced mass transport," Applied Physics Letters, October 8, 2001, Volume 79, pgs. 2471-2473
	A6	Kluth, P., "Fabrication of epitaxial CoSi ₂ nanowires," Applied Physics Letters, August 6, 2001, Vol. 79, pgs. 824-826
	A7	Zhang, Y., "Formation of metal nanowires on suspended single-walled carbon nanotubes," Applied Physics Letters, November 6, 2000, Vol. 77, pgs. 3015-3017

EXAMINER 	DATE CONSIDERED 9/13/03
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U.S. Patent Documents						
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	5,538,916	07/23/96	Kuroi et al.			
	5,592,643	01/07/97	Thomas			
	5,592,644	01/07/97	Thomas			
	5,994,733	11/30/99	Nishioka et al.			
	6,064,107	05/16/00	Yeh et al.			
	6,048,740	04/11/00	Hsu et al.			
	6,052,313	04/18/00	Atsumi et al.			
	6,062,931	05/16/00	Chuang et al.			
	6,044,008	03/28/00	Choi			

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APR 28 2003
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Foreign Patent Documents							
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	WO 01/18246	08/28/00	PCT				
	WO 01/23303	08/03/00	PCT				
	WO 02/19420	08/31/01	PCT				
	WO 02/37500	05/24/01	PCT				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A8	Berry, A.D., "Fabrication of GaAs and InAs wires in nanochannel gas," Applied Physics Letters, November 4, 1996, Vol. 69, pgs. 2846-2848
	A9	Li, Jian-Long, "Spontaneous formation of ordered indium nanowire array on Si(001)," Applied Physics Letters, October 22, 2001, Volume 79, pgs. 2826-2828
	A10	Jorritsma, J., "Fabrication of large arrays of metallic nanowires on V-grooved substrates," Applied Physics Letters, September 4, 1995, Volume 67, pgs. 1489-1491
	A11	Sekiba, Daiichiro, "Fabrication of stable nanopatterns on metals," Applied Physics Letters, September 30, 2002, Vol. 81, pgs. 2632-2634
	A12	Yin, A. J., "Fabrication of highly ordered metallic nanowire arrays by electrodeposition," Applied Physics Letters, August 31, 2001, Vol. 79, pgs. 1039-1041
	A13	He, J. Z., "Dispersion, refinement, and manipulation of single silicon nanowires," Applied Physics Letters, March 11, 2002, Vol. 80, pgs. 1812-1814
	A14	Franklin, Nathan R., "Integration of suspended carbon nanotube arrays into electronic devices and electromechanical systems," Applied Physics Letters, July 29, 2002, Vol. 81, pgs. 913-915
	A15	Homma, Yoshikazu, "Growth of suspended carbon nanotube networks on 100-nm-scale silicon pillars," Applied Physics Letters, September 16, 2002, Volume 81, pgs. 2261-2263
	A16	Yenilmez, Erhan, "Wafer scale production of carbon nanotube scanning probe tips for atomic force microscopy," Applied Physics Letters, March 25, 2002, Volume 80, pgs. 2225-2227

EXAMINER 	DATE CONSIDERED 9/13/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	



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INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)				Applicant Brent M. Segal et al.			
				Filing Date 07/25/01		Group Art Unit 1775	
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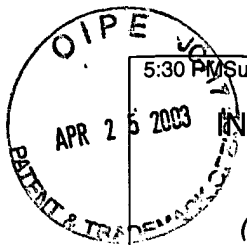
U.S. Patent Documents						
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	6,087,293	07/11/00	Carnahan et al.			
	6,128,214	10/03/00	Kuekes et al.			
	6,165,890	12/26/00	Kohl et al.			
	6,177,703	01/23/01	Cunningham			
	6,203,864	03/20/01	Zhang et al.			
	6,232,706	05/15/01	Dai et al.			
	6,256,767	07/03/01	Kuekes et al.			

GROUP 1700
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RECEIVED

Foreign Patent Documents							
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	WO 02/38496	11/12/01	PCT				
	WO 02/42204	11/2/01	PCT				
	WO 02/48701	12/11/01	PCT				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A17	Sax, Harald, "Polysilicon Overfill Etch Back Using Wet Chemical Spin-process Technology," 7 pgs.
	A18	Dinaro, Joanna, "Analysis of an Elementary Reaction Mechanism for Benzene Oxidation in Supercritical Water, Combustion Institute," 2000, Volume 28, pgs. 1529-1536
	A19	Monthieux, M., "Sensitivity of single-wall carbon nanotubes to chemical processing: an electron microscopy investigation," Carbon, 2001, Vol. 39, pgs. 1251-1272
	A20	Hou, P. X., "Multi-step purification of carbon nanotubes," 2002 Elsevier Science Ltd., March 8, 2001, Vol. 40, pgs. 81-85
	A21	Avouris, P., "Carbon nanotube electronics," Carbon, 2002, Vol. 40, pgs. 429-445
	A22	Chen, Bin, "Heterogeneous Single-Walled Carbon Nanotube Catalyst Discovery and Optimization," Chemical Materials, December 7, 2001, Vol. 14, pgs. 1891-1896
	A23	Maurin, I., "Carbon Miscibility in the Boron Layers of the MgB ₂ Superconductor," Chemical Materials, 2002, pgs. A-D
	A24	Hyeon-Lee, Jingyu, "Aero-Sol-Gel Synthesis of Nanostructured Silica Powders," Chemical Materials, 1997, Vol. 9, pgs. 2400-2403
	A25	McEuen, Paul L., "Single-Walled Carbon Nanotube Electronics, to be published in the inaugural issue of the IEEE Transactions on Nanotechnology (2002), 9 pgs.
	A26	Dürkop, T., "Nanotubes are High Mobility Semiconductors," Department of Physics, University of Maryland, 4 pgs.
	A27	Choi, Hee Cheul, "Spontaneous Reduction of Metal Ions on the Sidewalls of Carbon Nanotubes," J. Amer. Chem. Soc., May 7, 2002, pgs. A-B
	A28	Zheng, Bo, "Efficient CVD Growth of Single-Walled Carbon Nanotubes on Surfaces Using Carbon Monoxide Precursor," Nano Letters, 2002, pgs. A-D

EXAMINER 	DATE CONSIDERED 9/13/03
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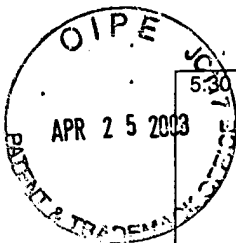
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	6,262,469	07/17/01	Le et al.			
	6,300,205	10/09/01	Fulford et al.			
	6,314,019	11/06/01	Kuekes, et al.			
	6,320,428	11/20/01	Atsumi et al.			
	6,322,713	11/27/01	Choi et al.			
	6,325,909	12/4/01	Li et al.			
	6,331,209	12/18/01	Jang et al.			
	6,346,413	02/12/02	Fodor et al.			
	6,348,295	02/19/02	Griffith et al.			
	6,348,700	02/19/02	Ellenbogen et al.			
	6,350,488	02/26/02	Lee et al.			
	6,358,756	03/19/02	Sandhu et al.			
	6,361,861	03/26/02	Gao et al.			
	6,362,073	03/26/02	Kim			

GROUP 1700
APR 28 2003
RECEIVED

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 02/48822	12/11/01	PCT				
	WO 02/054505	12/21/01	PCT				
	WO 02/059898	01/23/02	PCT				
	WO 02/060812	01/29/02	PCT				

Other Documents (Including Author, Title, Date Pertinent Pgs. , Etc.)		
	A29	Deng, S. Z., "Synthesis of silicon carbide nanowires in a catalyst-assisted process," Chemical Physics Letters, April 26, 2002, Vol. 356, pgs. 511-514
	A30	Zhang, R. Q., "Silicon nanotubes: Why not?," Chemical Physics Letters, 2002, Vol. 364, pgs. 251-258
	A31	Lei, Y., "Fabrication, characterization and Raman study of TiO ₂ nanowire arrays prepared by anodic oxidative hydrolysis of TiCl ₃ ," Chemical Physics Letters, 2001, Vol. 338, pgs. 231-236
	A32	Zheng, M. J., "Fabrication and optical properties of large-scale uniform zinc oxide nanowire arrays by one-step electrochemical deposition technique," Chemical Physics Letters, 2002, Vol. 363, pgs. 123-128
	A33	O'Connell, Michael J., "Reversible water-solubilization of single-walled carbon nanotubes by polymer wrapping," Chemical Physics Letters, 2001, Vol. 342, pgs. 265-271
	A34	Huang, Houjin, "Purification and alignment of arc-synthesis single-walled carbon nanotube bundles," Chemical Physics Letters, 2002, Vol. 356, pgs. 567-572

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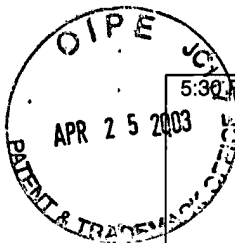
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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,380,434	04/30/02	Chiang			
	6,400,088	06/04/02	Livingston et al.			
	6,400,091	06/04/02	Deguchi et al.			
	6,406,776	06/18/02	D'Evelyn			
	6,417,606	07/09/02	Nakamoto et al.			
	6,420,726	07/16/02	Choi et al.			
	6,421,271	07/16/02	Gogl et al.			
	6,422,450	07/23/02	Zhou et al.			
	6,423,583	07/23/02	Avouris et al.			
	6,426,134	07/30/02	Lavin et al.			
	2001/0023123 A1	09/20/01	Kim			
	2001/0023986 A1	09/27/01	Mancevski			
	2002/0055010 A1	05/9/02	Gao et al.			

GROUP 1700
APR 25 2003
RECEIVED

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	WO 02/060813	01/30/02	PCT				
	WO 97/22971	12/12/96	PCT				
	WO 00/48195	8/17/00	WIPO				
	WO 98/42620	10/01/98	WIPO				
	WO 00/09443	02/24/00	WIPO				
	WO 00/17101	03/20/00	WIPO				
	WO 00/19494	04/06/00	WIPO				
	JP 11-011917	1/19/99	Japan				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A35	Kong, Jing, "Chemical vapor deposition of methane for single-walled carbon nanotubes," Chemical Physics Letters, 1998, Vol. 292, pgs. 567-574
	A36	Bergbreiter, David E., "Using Soluble Polymers To Recover Catalysts and Ligands," Chemical Reviews, March 5, 2002, pgs. A-AM

EXAMINER 	DATE CONSIDERED 9/13/03
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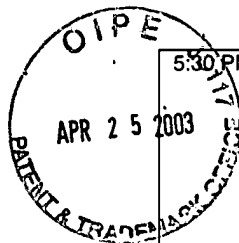
U.S. Patent Documents						
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[Signature]	2002/0061441 A1	05/23/02	Ogura et al.			
	2002/0068170 A1	06/06/02	Smalley et al.			
	2002/0081380 A1	06/27/02	Dillon et al.			
	2002/0081787 A1	06/27/02	Kohl et al.			
	2002/0088938 A1	07/11/02	Colbert et al.			
	2002/0090331 A1	07/11/02	Smalley et al.			
	2002/0092983 A1	07/18/02	Colbert et al.			
	2002/0092984 A1	07/18/02	Colbert et al.			
	2002/0096634 A1	07/25/02	Colbert et al.			
	2002/0098135 A1	07/25/02	Smalley et al.			
	2002/0102193 A1	08/01/02	Smalley et al.			
	2002/0102194 A1	08/01/02	Smalley et al.			
	2002/0102196 A1	08/01/02	Smalley et al.			
	2002/0102353 A1	08/01/02	Mauthner et al.			

GROUP 1700
APR 28 2003
RECEIVED

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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[Signature]	426,282 B1	08/30/90	EP				
	441,409 A3	07/27/88	EP				
	441,409 B1	07/27/88	EP				
	758,028 A3	07/09/96	EP				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
[Signature]	A37	Roucoux, Alain, "Reduced Transition Metal Colloids: A Novel Family of Reusable Catalysts?," Chemical Reviews, January 30, 2002, pgs. A-V
	A38	Yoshida, Jun-ichi, "Tag Strategy for Separation and Recovery," Chemical Reviews, March 18, 2002, pgs. A-X
	A39	De Vos, Dirk E., "Ordered Mesoporous and Microporous Molecular Sieves Functionalized with Transition Metal Complexes as Catalysts for Selective Organic Transformations," Chemical Reviews, January 31, 2002, pgs. A-Z
	A40	Connelly, Neil G., "Chemical Redox Agents for Organometallic Chemistry," Chemical Reviews, January 9, 1996, Vol. 96, pgs. 877-910
	A41	Dequesnes, Marc, "Calculation of pull-in voltages for carbon-nanotube-based nanoelectromechanical switches," Nanotechnology, January 22, 2002, Vol. 13, pgs. 120-131
	A42	Serp, Philippe, "Chemical Vapor Deposition Methods for the Controlled Preparation of Supported Catalytic Materials," Chemical Reviews, April 10, 2002, pgs. A-AR

EXAMINER [Signature]	DATE CONSIDERED 9/13/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	



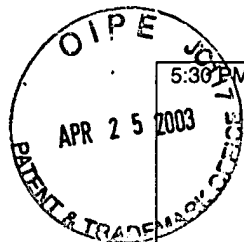
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APR 28 2003
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Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	1,205,436 A1	11/05/01	EP				
	1,209,123 A2	09/06/96	EP				
	1,225,613 A1	10/12/00	EP				
	2,364,933 A	07/18/01	GB				
	1,132,920 A2	02/27/01	EP				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A43	Diehl, Michael R., "Self-Assembled, Deterministic Carbon Nanotube Wiring Networks," Angew. Chem. Int. Ed., 200, Vol. 41, pgs. 353-356
	A44	Wind, S. J., "Localized and Directed Lateral Growth of Carbon Nanotubes from a Porous Template," IBM T.J. Watson Research Center, 17 pgs.
	A45	Wind, S. J., "Fabrication and Electrical Characterization of Top Gate Single-Wall Carbon Nanotube Field-Effect Transistors," IBM T. J. Watson Research Center, 14 pgs.
	A46	Harutyunyan, Aветik R., "CVD Synthesis of Single Wall Carbon Nanotubes under "Soft" Conditions," Nano Letters, February 25, 2002, pgs. A-F
	A47	Massot, L., "Electrodeposition of carbon films from molten alkaline fluoride media," Electrochimica Acta, January 28, 2002, Vol. 47, pgs. 1949-1957
	A48	Heinze, S., "Carbon Nanotubes as Schottky Barrier Transistors," Physical Review Letters, September 2, 2002, Volume 89, pgs. 106801-1 through 106801-4.
	A49	Duan, Xiangfeng, "Indium phosphide nanowires as building blocks for nanoscale electronic and optoelectronic devices," Nature, January 4, 2001, Vol. 409, pgs. 66-69
	A50	Chen, Robert J., "Noncovalent Sidewall Functionalization of Single-Walled Carbon Nanotubes for Protein Immobilization," J. Amer. Chem. Soc., 2001, Vol. 123, pgs. 3838- 3839
	A51	Puntes, Victor F., "Synthesis of hcp-Co Nanodisks," J. Amer. Chem. Soc., 2002, Vol. 124, pgs. 12874-12880
	A52	An, Lei, "Synthesis of Nearly Uniform Single-Walled Carbon Nanotubes Using Identical Metal-Containing Molecular Nanoclusters as Catalysts," J. Amer. Chem. Soc., 2002, Vol (?), total of 4 pgs.
	A53	Cassell, Alan M., "Directed Growth of Free-Standing Single-Walled Carbon Nanotubes," American Chemical Society, June 21, 1999, Vol. 121, pgs. 7975-7976
	A54	Bahr, Jeffrey L., "Functionalization of Carbon Nanotubes by Electrochemical Reduction of Aryl Diazonium Salts: A Bucky Paper Electrode," American Chemical Society, 2001, Vol. 123, pgs. 6536-6542
	A55	Fruchart, O., "Vertical self-organization of epitaxial magnetic nanostructures," Journal of Magnetism and Magnetic Materials, 2002, Vol. 239, pgs. 224-227
	A56	Zhang, J., "Fabrication and photoluminescence of ordered GaN nanowire arrays," Journal of Chemical Physics, October 1, 2001, Volume 115, pgs. 5714-5717
	A57	Dubois, S., "Fabrication and properties of arrays of superconducting nanowires," Journal of Materials Research March 1999, Vol. 14, pgs. 665-671
	A58	Liu, Z.Q., "Synthesis of α -SiO ₂ nanowires using Au nanoparticle catalysts of a silicon substrate," Journal of Materials Research, March 2001, Vol. 16, pgs. 683-686
	A59	Lei, Y., "Fabrication, characterization, and photoluminescence properties of highly ordered TiO ₂ nanowire arrays, J. Material Research, April 2001, Vol. 16, pgs. 1138-1144
	A60	Li, Y., "Fabrication of Highly ordered ZnO nanowire arrays in anodic alumina membranes," J. Materials Research, November 2000, Vol. 15, p. 2305-2308
	A61	Sellmyer, D.J., "Magnetism of Fe, Co and Ni nanowires in self-assembled arrays," J. of Physics: Condensed Matter, (2000) Vol. 13, pgs. R433-R460


EXAMINER 	DATE CONSIDERED 9/13/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	

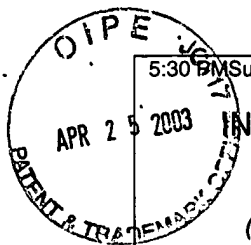


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Sheet	8	OF	14		

GROUP 1700
RECEIVED
APR 25 2003

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
A62	Blick, R.H., "Nanostructural silicon for studying fundamental aspects of nanomechanics," J. of Physics: Condensed Matter, (2002), pgs. R905-R945	
A63	Ciraci, S., "Quantum effects in electrical and thermal transport through nanowires," J. of Physics: Condensed Matter, (2001), pgs. R537-R568	
A64	Yu, Jae-Young, "Silicon Nanowires: Preparation, Device, Fabrication, and Transport Properties," J. Phys. Chem. B 2000, Vol. 104, pgs. 11864-11870	
A65	Yu, Zhonghua, "(n, m) Structural Assignments and Chirality Dependence in Single-Wall Carbon Nanotube Raman Scattering," J. Phys. Chem. B 2001, Vol. 105, pgs. 6831-6837	
A66	Wang, Y.W., "Fabrication of Ordered Ferromagnetic-Nonmagnetic Alloy Nanowire Arrays and their Magnetic Property Dependence on Annealing Temperature," J. Phys. Chem. B 2002, Vol. 106, pgs. 2502-2507	
A67	Murphy, Robert, "High-Yield, Nondestructive Purification and Quantification Method for Multiwalled Carbon Nanotubes," J. Phys. Chem. B 2002, Vol. 106, pgs. 3087-3091	
A68	Li, C.P., "Silicon Nanowires Wrapped with Au Film," J. Phys. Chem. B 2002, Vol. 106, pgs. 6980-6984	
A69	Steuerman, David W., "Interactions between Conjugated Polymers and Single-Walled Carbon Nanotubes," J. Phys. Chem. B 2002, Vol. 106, pgs. 3124-3130	
A70	Li, Jun, "Novel Three-Dimensional Electrodes: Electrochemical Properties of Carbon Nanotube Ensembles," J. Phys. Chem. B 2002, pgs. A-G	
A71	Cassell, Alan M., "Large Scale CVD Synthesis of Single-Walled Carbon Nanotubes," J. Phys. Chem. B 1999, Vol. 103, pgs. 6484-6492	
A72	Dai, Hongju, "Controlled Chemical Routes to Nanotube Architectures, Physics, and Devices," J. Phys. Chem. B 1999, Vol. 103, pgs. 11246-11255	
A73	Chiang, I.W., "Purification and Characterization of Single-Wall Carbon Nanotubes (SWNTs) Obtained from the Gas-Phase Decomposition of CO (HiPco Process)," J. Phys. Chem. B 2001, Vol. 105, pgs. 8297-8301	
A74	Tulchinsky, D.A., "Fabrication and domain imaging of iron magnetic nanowire arrays," J. Vac. Sci. Technol., May/June 1998, A 16(3), pgs. 1817-1819	
A75	Yun, Wan Soo, "Fabrication of metal nanowire using carbon nanotube as a mask," J. Vac. Sci. Technol., Jul/Aug 2000, A 18(4), pgs. 1329-1332	
A76	Batra, Inder P., "Quantum transport through one-dimensional aluminum wires," J. Vac. Sci. Technol., May/June 2002, B 20(3), pgs. 812-817	
A77	Legrand, B., "Silicon nanowires with sub 10 nm lateral dimensions: From atomic force microscope lithography based fabrication to electrical measurements," J. Vac. Sci. Technol., May/June 2002, B 20(3), PGS.862-870	
A78	Tsutsumi, Toshiyuki, "Fabrication technology of ultrafine SiO ₂ masks and Si nanowires using oxidation of vertical sidewalls of a poly-Si layer," J. Vac. Sci. Technol., Jan/Feb 1999, B 17(1), pgs. 77-81	
A79	Namatsu, Hideo, "Fabrication of one-dimensional nanowire structures utilizing crystallographic orientation in silicon and their conductance characteristics," J. Vac. Sci. Technol., Sept/Oct 1997, B 15(5), pgs. 1688-1696	
A80	Namatsu, Hideo, "Fabrication of thickness-controlled silicon nanowires and their characteristics," J. Vac. Sci. Technol., Nov/Dec 1995, B 13(6), pgs. 2166-2169	
A81	Cassell, Alan M., "Combinatorial Optimization of Heterogeneous Catalysts Used in the Growth of Carbon Nanotubes," Langmuir 2001, Vol. 17, pgs. 260-264	
A82	Lewenstein, Justin C. "High-Yield Selective Placement of Carbon Nanotubes on Pre-Patterned Electrodes, Nano Letters., 2002, Vol 2, No. 5, pgs. 443-446	
A83	Martino, Anthony, "Catalyst Testing of Highly Dispersed Metal Nanoparticles for Coal Liquefaction and Coal/Waste Coprocessing," Catalysis and Chemical Technologies Department, Sandia National Laboratories, pgs. 1-7	
A84	Peng, X.S., "Electrochemical fabrication of ordered Ag ₂ S nanowire arrays," Materials Research Bulletin, 2002, No. 37, pgs. 1369-1375	
A85	Robinson, L.A. W., "Self-aligned electrodes for suspended carbon nanotube structures," Microelectronics Research Centre, Cavendish Laboratory, University of Cambridge and Hitachi Cambridge Laboratory, pgs. 1-2	
A86	Moore, Gordon E., "Cramming more components into integrated circuits," Electronics, April 19, 1965, Vol. 38, No. 8(4), 4 pgs.	

EXAMINER 	DATE CONSIDERED 9/14/03
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Sheet	9	OF	14		

GROUP 1700
RECEIVED
APR 28 2003

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A87	Fan, Hongyou, "Multiphased assembly of nanoporous silica particles," Journal of Non-Crystalline Solids (2001) Vol. 285, pgs. 71-78
	A88	Franklin, Nathan R., "Integration of suspended carbon nanotube arrays into electronic devices and electromechanical systems," Applied Physics Letters, July 29, 2002, Vol. 81, No. 5, 913-915
	A89	Kong, Jing, "Synthesis of individual single-walled carbon nanotubes on patterned silicon wafers," Nature, October 29, 1998, Vol. 395, pgs. 878-881
	A90	Duan, Xiangfeng, "Nonvolatile Memory and Programmable Logic from Molecule-Gated Nanowires," Nano Letters, 2002, pgs. A-D
	A91	Fuhrer, M.S., "High-Mobility Nanotube Transistor Memory," Nano Letters, 2002, Vol. 2, No. 7, pgs. 755-759
	A92	Radosavljević, M., "Novolatile Molecular Memory Elements Based on Ambipolar Nanotube Field Effect Transistors," Nano Letters, 2002, Vol. 2, pgs. 761-764.
	A93	Derycke, V., "Catalyst-Free Growth of Ordered Single-Walled Carbon Nanotube Networks," Nano Letters, 2002, pgs. A-D
	A94	Joselevich, Ernesto, "Vectorial Growth of Metallic and Semiconducting Single-Wall Carbon Nanotubes," Nano Letters, xxxx, Vol. 0, pgs. A-E
	A95	Javey, Ali, "Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators," Nano Letters, 2002, pgs. A-D
	A96	Robertson, John, "Section 11. Non-Crystalline Carbon, Properties and Prospects for Non-Crystalline Carbons," Journal of Non-Crystalline Solids 299-302, 2002, pgs. 798-804
	A97	Ci, Lijie, "Double Wall Carbon Nanotubes Promoted by Sulfur in a Floating Iron Catalyst CVD System," Chemical Physics Letters 359, June 13, 2002, pgs. 63-67
	A98	Gromov, A., "Purification of Carbon Nanotubes," Caramel Workshop, January 23, 2002, pgs. 1-13
	A99	Cui, Yi, "Functional Nanoscale Electronic Devices Assembled Using Silicon Nanowire Building Blocks," Science, February 2, 2001, Vol. 291, pgs. 851-853
	A100	Wang, Suhua, "Thermal Oxidation of Cu ₂ S Nanowires: a Template Method for the Fabrication of Mesoscopic Cu _x O (x = 1,2) Wires, Phys. Chem. Chem. Phys., 2002, Vol. 4, pgs. 3425-3429
	A101	Untiedt, C., "Fabrication and Characterization of Metallic Nanowires," Physical Review B, July 15, 1997, Vol. 56, No. 4, pgs. 2154-2160
	A102	Marsen, Bjorn, "Fullerene-Structured Nanowires of Silicon," Physical Review B, October 15, 1999, Vol. 60, No. 16, pgs. 11593-11600
	A103	Berber, Savas, "Unusually High Thermal Conductivity of Carbon Nanotubes," Physical Review Letters, May 15, 2000, Vol. 84, No. 20, pgs. 4613-4616
	A104	Yao, Zhen, "High-Field Electrical Transport in a Single-Wall Carbon Nanotubes," Physical Review Letters, March 27, 2000, Vol. 84, No. 13, pgs. 2641-2944
	A105	Zhang, Y.F., "Liquid Phase Synthesis of Carbon Nanotubes," Physica B 323, 2002, pgs. 293-295
	A106	Dresselhaus, M.S., "Raman Spectroscopy on One Isolated Carbon Nanotube," Physica B 323, 2002, pgs. 15-20
	A107	Heinze, S., "Carbon Nanotubes as Schottky Barrier Transistors," Physical Review Letters, September 2, 2002, Vol. 89, No. 10, 106801-1 - 106801-4
	A108	Fu, Qiang, "Electrodeposition of Carbon Films from Various Organic Liquids," Surface & Coatings Technology 124, 2000, pgs. 196-200
	A109	Hernadi, K., "Reactivity of Different Kinds of Carbon During Oxidative Purification of Catalytically Prepared Carbon Nanotubes," Solid State Ionics 141-142, 2001, pgs. 203-209
	A110	Colomer, J. F., "Different Purification Methods of Carbon Nanotubes Produced by Catalytic Synthesis," Synthetic Metals 103, 1999, pgs. 2482-2483
	A111	Dalton, A.B., "A Functional Conjugated Polymer to Process, Purify and Selectively Interact with Single Wall Carbon Nanotubes," Synthetic Metals 121, 2001, pgs. 1217-1218
	A112	Tat, Kerk Wai, "Preparation and Characterization of Cobalt/Silica Core-Shell Magnetic Nanoparticles," Dept. Chem., National University of Singapore 2000/2001, pgs.1-5
	A113	Shipley, Microposit® XP-90104A E-Beam Resist, Preliminary Product Information, pgs. 1-2,
	A114	Smalley, R. E., Foreword (Publication unknown), January 2001

EXAMINER 	DATE CONSIDERED 9/13/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	



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INFORMATION DISCLOSURE
IN AN APPLICATION

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Docket Number
112020.125NAN-1Application Number
09/915,093Applicant
Brent M. Segal et al.Filing Date
07/25/01Group Art Unit
1775GROUP 1700
RECEIVED
APR 28 2003

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
A115	Dresselhaus, Mildred S., Preface (Publication unknown) January 2001	
A116	Advanced Semiconductor Engineering, Inc., Substrate Design 420L BGA 35*35, Dwg. No. K-I-0420, 2 pages	
A117	Integrated Device Technology, Inc., DA Package Design, 9/25/97, 2 pages	
A118	Integrated Device Technology, Inc. BG Package Outline, 2/18/94	
A119	Pimenta, M.A., "Diameter dependence of the Raman D-band in isolated single-wall carbon nanotubes," <i>Physical Review B</i> , Vol. 64 pgs. 04140-1-04140-4	
A120	Duan, Xiangfeng, "Nonvolatile Memory and Programmable Logic from Molecule-Gated Nanowires, Nano Letters, March 2002, pgs. 1-4	
A121	Introduction and Historical Perspective, Chapter 1, pgs. 1-48	
A122	Modern CMOS Technology, Chapter 2, pgs. 49-92	
A123	Crystal Growth, Wafer Fabrication and Basic Properties of Silicon Wafers, Chapter 3, pgs. 93-149	
A124	Franklin, Nathan R. and Hongjie Dai, "An Enhanced CVD Approach to Extensive Nanotube Networks with Directionality." <i>Advanced Materials</i> (2000): 890 – 894.	
A125	Kong, Jing; Chongwu Zhou; Erhan Yenilmez; Hongjie Dai. "Alkaline metal-doped n-type semiconducting nanotubes as quantum dots." <i>Applied Physics Letters</i> (11 Dec. 2000): 3977 – 3979.	
A126	Tombler, Thomas W.; Chongwu Zhou; Jing Kong; Hongjie Dai. "Gating individual nanotubes and crossed with scanning probes." <i>Applied Physics Letters</i> (24 April 2000): 2412 – 2414.	
A127	Zhou, Chongwu: <i>et al.</i> "Electrical measurements of individual semiconducting single-walled carbon nanotubes of various diameters." <i>Applied Physics Letters</i> (20 March 2000): 1597 – 1599.	
A128	Zhang, Y. and Hongjie Dai. "Formation of metal nanowires on suspended single-walled carbon nanotubes." <i>Applied Physics Letters</i> (6 Nov. 2000): 3015 – 3017.	
A129	Chen, Robert J. <i>et al.</i> "Molecular photodesorption from single-walled carbon nanotubes." <i>Applied Physics Letters</i> (1 Oct. 2001): 2258 – 2260.	
A130	Zhang, Y. <i>et al.</i> "Electric-field-directed growth of aligned single-walled carbon nanotubes." <i>Applied Physics Letters</i> (5 Nov. 2001): 3155 – 3157.	
A131	Zhang, Y. <i>et al.</i> "Metal coating on suspended carbon nanotubes and its implication to metal-tube interaction." <i>Chemical Physics Letters</i> (24 Nov. 2000): 35 – 41.	
A132	Chen, Robert J. <i>et al.</i> "Noncovalent Sidewall Functionalization of Single-Walled Carbon Nanotubes for Protein Immobilization." <i>American Chemical Society</i> (2001): 3838 – 3839.	
A133	Li, Yiming <i>et al.</i> "Growth of Single-Walled Carbon Nanotubes from Discrete Catalytic Nanoparticles of Various Sizes." <i>Journal of Physical Chemistry B</i> (2001).	
A134	Cassell, Alan M. <i>et al.</i> "Large Scale CVD Synthesis of Single-Walled Carbon Nanotubes." <i>American Chemical Society</i> (1999): 6484 – 6492.	
A135	Fan, Shoushan <i>et al.</i> "Carbon nanotube arrays on silicon substrates and their possible application." <i>Physica E</i> (2000): 179 – 183.	
A136	Liu, Lei <i>et al.</i> "Controllable Reversibility of an sp ² to sp ³ Transition of a single Wall Nanotube under the Manipulation of an AFM Tip." <i>Physical Review Letters</i> (22 May 2000): 4950 – 4953.	
A137	Kong, Jing <i>et al.</i> "Quantum Interference and Ballistic Transmission in Nanotube Electron Waveguides." <i>Physical Review Letters</i> (3 Sept. 2001); 87, 106801(4).	
A138	Liu, C. <i>et al.</i> "Synthesis of Macroscopically Long Ropes of Well-Aligned Single-Walled Carbon Nanotubes." <i>Advanced Materials</i> (16 Aug. 2000); 12, 1190 – 1192.	

EXAMINER

DATE CONSIDERED

9/14/03

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.



530 PMSubt. For, PTO-1449				Docket Number 112020.125NAN-1		Application Number 09/915,093	
INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)				Applicant Brent M. Segal et al.			
				Filing Date 07/25/01		Group Art Unit 1775	
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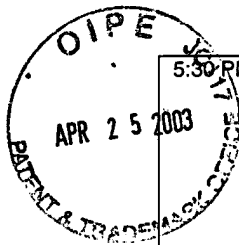
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U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,324,814	4/13/82	Reichert	427	86	
	4,378,629	4/5/83	Bozlev et al.	29	580	
	4,495,551	1/22/85	Yoder	357	22	
	4,510,016	4/9/85	Chi et al	156	643	
	4,673,474	06/16/87	Ogawa	204	157.64	
	4,707,197	11/17/87	Hensel et al.	437	189	
	4,758,534	7/19/88	Derkits Jr. et al.	437	89	
	4,901,121	2/13/90	Gibson et al.	357	15	
	4,903,090	2/20/90	Yokoyama	357	22	
	4,939,556	07/03/90	Eguchi et al.	357	4	
	5,010,037	4/23/91	Lin et al.	437	200	
	5,032,538	7/16/91	Bozler et al.	437	83	
	5,057,883	10/15/91	Noda	357	22	
	5,089,545	02/18/92	Pol	524	17	
	5,155,561	10/13/92	Bozler et al.	357	22	
	5,168,070	12/1/92	Luth	437	31	
	5,175,597	12/29/92	Cachier et al.	257	267	

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 98/42620	10/01/98	WIPO				
	WO 00/09443	02/24/00	WIPO				
	WO 00/17101	03/20/00	WIPO				
	WO 00/19494	04/06/00	WIPO				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A139	Kiang, Ching-Hwa. "Growth of Large-Diameter Single-Walled Carbon Nanotubes." <i>American Chemical Society</i> (2000); 104, 2454 - 2456.
	A140	Cheung, Chin Li et al. "Growth and fabrication with single-walled carbon nanotube probe microscopy tips." <i>Applied Physics Letters</i> (2000); 76, 3136 - 3138.
	A141	Bozovic, Dolores et al. "Electronic properties of mechanically induced kinds on single-walled carbon nanotubes." <i>Applied Physics Letters</i> (4 June 2001); 78, 3693 - 3695.

EXAMINER 	DATE CONSIDERED 9/14/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	



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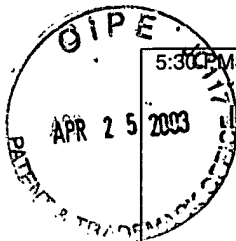
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GROUP 1700

U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,290,715	3/1/94	Pardya	437	29	
	5,453,970	09/26/95	Rust et al.	396	176	
	5,475,341	12/12/95	Reed	327	566	
	5,563,424	10/8/96	Yang et al	257	40	
	5,589,692	12/31/96	Reed	257	23	
	5,739,057	04/14/98	Tiwari et al.	438	172	
	5,747,180	05/05/98	Miller et al.	428	601	
	5,751,156	05/12/98	Muller et al.	324	699	
	5,847,565	12/08/98	Narayanan	324	322	
	5,858,862	01/12/99	Westwater et al.	438	503	
	6,038,060	03/14/00	Crowley	359	328	
	6,069,380	05/30/00	Chou et al.	257	315	

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A142	Hafner, Jason H. <i>et al.</i> "High-Yield Assembly of Individual Single-Walled Carbon Nanotube Tips for Scanning Prone Microscopies." <i>The Journal of Physical Chemistry</i> (1 Feb. 2001); 105, 743 – 746.
	A143	Hafner, J.H. <i>et al.</i> "Structural and functional imaging with carbon nanotube AFM probes." <i>Progress in Biophysics & Molecular Biology</i> (2001); 77, 73 – 110.
	A144	Jorio, A. <i>et al.</i> "Joint density of electronic states for one isolated single-wall carbon nanotube studied by resonant Raman scattering." <i>Physical Review B</i> (2001); 63: 24541(4).
	A145	Filho, A. G. Souza <i>et al.</i> "Electronic transition energy E_{ii} for an isolated (n, m) single-wall carbon nanotube obtained by anti-Stokes/Stokes resonant Raman intensity ratio." <i>Physical Review</i> (2002); 63, 241404(4)
	A146	Saito, R. <i>et al.</i> "Chirality-dependent G-band Raman intensity of carbon nanotubes." <i>Physical Review</i> (2001); 64, 085312(7).
	A147	Jorio, A. <i>et al.</i> "Structural (n, m) Determination of Isolated Single-Wall Carbon Nanotubes by Resonant Raman Scattering." <i>Physical Review Letters</i> (5 Feb. 2001); 86, 1118 – 1121.
	A148	Woolley, Adam T. <i>et al.</i> "Structural biology with carbon nanotube AFM probes." <i>Chemistry & Biology</i> (2000); 7, R193 – 204.
	A149	Li, Yan <i>et al.</i> "Preparation of Monodispersed Fe-Mo Nanoparticles as the Catalyst for CVD Synthesis of Carbon Nanotubes." <i>Chemical Material</i> (2001); 13; 1008 – 1014.
	A150	Rao, C. N. R. <i>et al.</i> "Nanotubes." <i>CHEMPHYCHEM</i> (2001); 2, 78 – 105.
	A151	Nerushev, Oleg A. <i>et al.</i> "Carbon nanotube films obtained by thermal chemical vapor deposition." <i>Journal of Chemistry Materials</i> (2001); 11, 1122 – 1132.
	A152	Flahaut, E. <i>et al.</i> "Synthesis of single-walled carbon nanotube-Co-MgO composite powders and extraction of the nanotubes." <i>Journal of Chemical Materials</i> (2000); 10, 249 – 252.
	A153	Dresselhaus, Mildred S. and Phaedon Avouris. "Introduction to Carbon Materials Research." <i>Topics Applied Physics</i> (2001); 80, 1 – 9.
	A154	Dresselhaus, Mildred S. and Morinobu Endo. "Relation of Carbon Nanotubes to Other Carbon Materials." <i>Topics in Applied Physics</i> (2001); 80, 11 – 28.
	A154	Dai, Hongjie. "Nanotube Growth and Characterization." <i>Topics in Applied Physics</i> (2001); 80, 29 – 53.
	A155	Charlier, Jean-Christophe and Sumio Iijima. "Growth Mechanisms of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 55 – 81.

EXAMINER 	DATE CONSIDERED 9/14/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	



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Sheet	13	OF	14				

RECEIVED
APR 28 2003

GROUP 1700

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A156	Tenne, Richard and Alex K. Zettl. "Nanotubes from Inorganic Materials." <i>Topics in Applied Physics</i> (2001); 80, 81 – 112.
	A157	Louie, Steven G. "Electronic Properties, Junctions, and Defects of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 113 – 145.
	A158	Yao, Zhen et al. "Electrical Transport Through Single-Wall Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 147 – 171.
	A159	Odom, Teri Wang et al. "Scanning Probe Microscopy Studies of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 173 – 211.
	A160	Saito, Riichiro and Hiromichi Kataura. "Optical Properties and Raman Spectroscopy of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 213 – 247.
	A161	Fink, Joerg H. and Philippe Lambin. "Electron Spectroscopy Studies of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 247 – 272.
	A162	Hone, James. "Phonons and Thermal Properties of Carbon Nanotubes." <i>Topics of Applied Physics</i> (2001); 80, 273 – 286.
	A163	Yakobson, Boris I. And Phaedon Avouris. "Mechanical Properties of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 287 – 327.
	A164	Forro, Laszlo and Christian Schoenenberger. "Physical Properties of Multi-wall Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 329 – 391.
	A165	Ajayan, Pulickel M. and Otto Z. Zhou. "Applications of Carbon Nanotubes." <i>Topics in Applied Physics</i> (2001); 80, 391 – 425.
	A166	Kong, J. et al. "Synthesis, integration, and electrical properties of individual single-walled carbon nanotubes." <i>Applied Physics A</i> (1999); 69, 305 – 308.
	A167	Dai, Hongjie et al. "Exploiting the properties of carbon nanotubes for nanolithography." <i>Applied Physics Letters</i> (14 Sept. 1998); 73, 1508 – 1510.
	A168	Soh, Hyongsok T. et al. "Integrated nanotube circuits." <i>Applied Physics Letters</i> (2 Aug. 1999); 75, 627 – 629.
	A169	Bozler, C.O., et al., "Fabrication and Microwave Performance of the Permeable Base Transistor," <i>IEEE Tech. Dig. Int. Electron Devices Meeting</i> (1979) 384.
	A170	Cheng, H. M. et al. "Large-scale and low-cost synthesis of single-walled carbon nanotubes by the catalytic pyrolysis of hydrocarbons." <i>Applied Physics Letters</i> (22 June 1998); 72, 3282 – 3284.
	A171	Shim, Moonsub et al. "Polymer Functionalization for Air-Stable n-Type Carbon Nanotube Field-Effect Transistors." <i>Journal of American Chemical Society</i> (2001); 123, 11512 – 11513.
	A172	Haddon, R. C. "C70 Thin Film Transistors." <i>Journal of the American Chemical Society</i> (1996); 118, 3041 – 3042.
	A173	Hafner, Jason H. et al. "Direct Growth of Single-Walled Carbon Nanotube Scanning Probe Microscopy Tips." <i>Journal of the American Chemical Society</i> (1999); 121, 9750 – 9751.
	A174	Hafner, Jason H. et al. "Growth of nanotubes for probe microscopy tips." <i>Scientific Correspondence</i> (29 April 1999); 398, 761, 762.
	A175	Bekyarova, E. et al. "Oxidation and Porosity Evaluation of Budlike Single-Wall Carbon Nanohorn Aggregates." <i>American Chemical Society</i> (2002).
	A176	Hafner, Jason H. et al. "Catalytic growth of single-wall carbon nanotubes from metal particles." <i>Chemical Physics Letters</i> (30 Oct. 1998); 296, 195 – 202.
	A177	Li, Yan et al. "Preparation of Monodispersed Fe-Mo Nanoparticles as the Catalyst for CVD Synthesis of Carbon Nanotubes." <i>Chemical Material</i> (2001); 13, 1008 – 1014.
	A178	Kiang, Ching-Hwa. "Growth of Large-Diameter Single-Walled Carbon Nanotubes." <i>Journal of Physical Chemistry A</i> (2000); 104, 2454 – 2456.
	A179	Nerushev, Oleg A. et al. "Carbon nanotube films obtained by thermal chemical vapour deposition." <i>Journal of Material Chemistry</i> (2001); 11, 1122 – 1132.
	A180	Zhou, Chongwu et al. "Electrical measurements of individual semiconducting single-walled carbon nanotubes of various diameters." <i>Applied Physics Letters</i> (20 March 2000); 76, 1597 – 1599.
	A181	Yu, et al., <i>J. Phys. Chem. B</i> , 105:6831-6837 (2001).
	A182	Berber, S., <i>Phys. Rev. Lett</i> , 84, 4613 (2000).
	A183	Bahr, Jeffrey L. and James. M. Tour. "Highly Functionalized Carbon Nanotubes Using in Situ Generated Diazonium Compounds." <i>Chemical Materials</i> (2001); 13, 3823 – 3824.

EXAMINER 	DATE CONSIDERED 9/14/03
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	

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Applicant
Brent M. Segal et al.Filing Date
07/25/01Group Art Unit
1775

Sheet 14 OF 14

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

A184	Peigney, Alain <i>et al.</i> "A Study of the Formation of Single- and Double-Walled Carbon Nanotubes by a CVD Method." <i>Journal of Physical Chemistry B</i> (2001); 105, 9699 – 9710.
A185	Yao, B. D. and N. Wang. "Carbon Nanotube Arrays Prepared by MWCVD." <i>Journal of Physical Chemistry</i> (2001); 105, 11395 – 11398.
A186	Ago, Hiroki <i>et al.</i> "Gas-Phase Synthesis of Single-wall Carbon Nanotubes from Colloidal Solution of Metal Nanoparticles." <i>Journal of Physical Chemistry B</i> (1 Nov. 2001); 105, 10453 – 10456.
A187	Ng, Hou Tee <i>et al.</i> "Soft-Lithography-Mediated Chemical Vapor Deposition of Architected Carbon Nanotube Networks on Elastomeric Polymer." <i>American Chemical Society</i> (2001).
A188	Derycke, V. <i>et al.</i> "Carbon Nanotube Inter- and Intramolecular Logic Gates." <i>Nano Letters</i> (Sept. 2001); 1, 453 – 456.
A189	Erkoc <i>et al.</i> , <i>Int. J. Modern Phys. C</i> , 12:865-870 (2001).
A190	Benerjee, Sarbajit and Stanislaus S. Wong. "Functionalization of Carbon Nanotubes with a Metal-Containing Molecular Complex." <i>Nano Letters</i> (2001); 0, A – E.
A191	Reynoso, J. 391PGA Drawings (3): Project No. 32639103. <i>Kyocera America, Inc.</i> (12 April 1994).
A192	Diehl, Michael R. <i>et al.</i> "Self-Assembled, Deterministic Carbon Nanotube Wiring Networks." <i>Angew. Chemical International Edition</i> (2002); 41, 353 – 356.
A193	Table of Contents for Semiconductor Consulting Services (1999).
A194	Sidorov, S. N. <i>et al.</i> "Cobalt Nanoparticle Formation in the Pores of Hyper-Cross-Linked Polystyrene." <i>Chemical Materials</i> (1999); 11, 3210 – 3215.
A195	Brown, David A. <i>et al.</i> "Kinetics of Iron(III) Chelation from Polynuclear Oxo-Hydroxy Aggregates by Hydroxamic Acids." <i>Inorganic Chemistry</i> (1999); 38, 5198 – 5202.
A196	Douglas, Trevor and Vistoria T. Stark. "Nanophase Cobalt Oxyhydroxide Mineral Synthesized within the Protein Cage of Ferritin." <i>Inorganic Chemistry</i> (2000); 39, 1828 – 1830.
A197	Hatzikonstantinidou <i>et al.</i> , <i>Phys. Scripta</i> 54: 226-229 (1994)
A198	Cao, Anyuan <i>et al.</i> "Macroscopic Three-Dimensional Arrays of Fe Nanoparticles Supported in Aligned Carbon Nanotubes." <i>The Journal of Physical Chemistry B</i> (2001); 105, 11937 – 11940.
A199	Li, Shoutian <i>et al.</i> "Semiconductor Nanoparticles in Contact: Quenching of the Photoluminescence from Silicon Nanocrystals by WO ₃ nanoparticles Suspended in Solution." <i>The Journal of Physical Chemistry B</i> (1998); 102, 7319 – 7322.
A200	Zhang, Shengjun <i>et al.</i> "Select Pathways to Carbon Nanotube Film Growth." <i>Advanced Materials</i> (3 Dec. 2001); 13, 1767 – 1770.
A201	Wei, B. Q. <i>et al.</i> "Organized assembly of carbon nanotubes." <i>Nature</i> (4 April 2002); 416, 495 – 496.
A202	Zhao, Y.-P. <i>et al.</i> "Frequency-dependent electrical transport in carbon nanotubes." <i>Physical Review B</i> (2001); 64, 201402(4).
A203	Zhu, H. W. <i>et al.</i> "Direct Synthesis of Long Single-Walled Carbon Nanotube Strands." <i>Science</i> (3 May 2002); 296, 884 – 886.
A204	Ajayan, P. M. <i>et al.</i> "Nanotubes in a Flash – Ignition and Reconstruction." <i>Science</i> (26 April 2002); 296, 705.
A205	Franklin, Nathan R. <i>et al.</i> "Patterned growth of single-walled carbon nanotubes on full 4-inch wafers." <i>Applied Physics Letters</i> (31 Dec. 2001); 79, 4571 – 4573.
A206	Fan, Shoushan <i>et al.</i> "Self-Oriented Regular Arrays of Carbon Nanotubes and Their Field Emission Properties." <i>Science</i> (22 Jan. 1999); 283, 512 – 514.
A207	Sohn, Jung Inn, <i>et al.</i> , "Patterned selective growth of carbon nanotubes and large field emission from vertically well-aligned carbon nanotube field emitter arrays." <i>Appl. Phys. Letters</i> (12 Feb. 2001); 78, 901 – 903.
A208	Postma, Henk W. C. <i>et al.</i> "Manipulation and Imaging of Individual Single-Walled Carbon Nanotubes with an Atomic Force Microscope." <i>Advanced Materials</i> (1 Sept. 2000); 12, 1299 – 1302.
A209	Chen, J. <i>et al.</i> , "Large On-Off Ratios and Negative Differential Resistance in a Molecular Electronic Device," <i>Science</i> , Vol. 286, 19 Nov. 1999, pp. 1550-1551
A210	Collier, C.P., <i>et al.</i> , "Electronically Configurable Molecular-Based Logic Gates," <i>Science</i> , Vol. 285, 16 Jul. 1999, pp. 391-394.
A211	"IBM Builds Tiny Transistor that Beats Silicon", <i>Technology – Reuters, Yahoo</i> , May 16, 2002.
A212	Yao, Z., <i>et al.</i> , <i>Phys. Rev. Lett.</i> , 84, 2941 (2000)..

EXAMINER

DATE CONSIDERED

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Pubt. For, PTO-1449

INFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number
112020.125
NAN-1Application Number
09/915,093Applicant
SEGAL et al.

Sheet 1 OF 3

Filing Date
July 25, 2001Group Art Unit
2823

U.S. Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2001/0004979	06/28/01	Han et al.	216	4	
	2002/0125805	09/12/2002	Hsu	313	309	
	2002/0130353	09/19/02	Lieber et al.	257	315	
	2002/0160111	10/31/02	Sun et al.	427	248.1	
	2002/0172639	11/21/02	Horiuchi	423	477.2	
	2002/0173083	11/21/02	Avouris et al.	438	129	
	2002/0175323	11/28/02	Guillom et al.	257	10	
	2002/0175390	11/28/02	Goldstein et al.	257	481	
	2002/0179434	12/5/02	Dai et al.	204	242	
	6,187,823	02/13/01	Haddon et al.	516	32	

Foreign Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 01/44796	6/21/01	PCT				
	WO 00/63115	10/26/2000	PCT				
	WO 01/03208	1/11/01	PCT				
	EP 1,096,533	95/02/01	Europe				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

	A1	Kong, J., et al., "Chemical Vapor Deposition of Methane for Single-Walled Carbon Nanotubes." Chemical Physics Letters, 292, 567, 1998.
	A2	Li, Y., et al., "Growth of Single-Walled Carbon Nanotubes from Discrete Catalytic Nanoparticles of Various Sizes." <i>The Journal of Physical Chemistry B</i> (2001); 105, 11424.
	A3	Colomer, J.-F., et al., "Characterization of Single-Walled Carbon Nanotubes Produced by CCVD Method." <i>Chemical Physics Letters</i> (2001); 345, 11-17.
	A4	Li, Y. et al., "Preparation of Monodispersed Fe-Mo Nanoparticles as the Catalyst for CVD Synthesis of Carbon Nanotubes." <i>Chem. Mater.</i> , 12, 1008, 2001.
	A5	Cassell, A., et al., "Directed Growth of Free-Standing Single-Walled Carbon Nanotubes." <i>Journal of the American Chemical Society</i> (1999); Vol. 121, 7975-7976.

EXAMINER

DATE CONSIDERED

9/14/03

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U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,198,655	03/6/01	Heath et al.	365	151	
	6,232,706	05/15/01	Dai et al.	313	309	
	6,250,984	06/26/01	Jin et al.	445	51	
	6,322,713	11/27/01	Choi et al.	216	38	
	6,350,488	02/26/02	Lee et al.	427	249.1	
	6,407,443	06/18/02	Chen et al.	257	616	
	6,413,487	07/02/02	Rasasco et al.	423	447.3	
	6,432,740	08/13/02	Chen	438	99	
	6,495,116	12/17/02	Herman	423	447.3	
	6,515,339	02/04/03	Shin et al.	257	368	
	6,518,156	02/11/03	Chen et al.	438	597	
	6,566,983	05/20/03	Shin	333	193	
	6,574,130	06/03/03	Segal et al.	365	129	

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A6	Delzeit, L., et al., "Multilayered Metal Catalysts for Controlling the Density of Single-walled Carbon Nanotube Growth." <i>Chemical Physics Letters</i> , 348, 368, 2001.
	A7	Wei, Y., et al., "Effect of Catalyst Film Thickness on Carbon Nanotube Growth by Selective Area Chemical Vapor Deposition." <i>Applied Physics Letters</i> (2001); Vol. 78, pgs. 1394-1396.
	A8	Su., M., et al., "A Scalable CVD Method for the Synthesis of Single-Walled Carbon Nanotubes with High Catalyst Productivity." <i>Chemical Physics Letters</i> (2000); Vol. 322, 231-326.
	A9	Harutyunyan, A., et al., "CVD Synthesis of Single Wall Carbon Nanotubes under 'Soft' Conditions." <i>Nano Letters</i> Vol. 2c no 5 525 (2002); Published on web 3/27/02
	A10	Li, Q., et al., "High-Density Growth of Single-Wall Carbon Nanotubes on Silicon by Fabrication of Nanosized Catalyst Thin Films." <i>Chem. Mater.</i> (2002), 14, 4262; Published on web 9/11/02
	A11	Javey, A., et al., "Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators." <i>Nano Letters</i> (2002); Vol. 2 No. 9 929-932. Published on web 7/31/02
	A12	Chen, B., et al., "Heterogeneous Single-Walled Carbon Nanotube Catalyst Discovery and Optimization." <i>Chem. Mater.</i> (2002); Vol. 14 1891-1896.

EXAMINER 	DATE CONSIDERED 9/14/03
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				Filing Date July 25, 2001	Group Art Unit 2823
Sheet	3	OF	3		

	A13	Yenilmez, E., et al., "Wafer Scale Production of carbon Nanotube Scanning Probe Tips for Atomic Force Microscopy." <i>Applied Physics Letters</i> . (2002); Vol. 80 No. 12, 2225-2227.
	A14	Collins, P., et al., "Engineering Carbon Nanotubes and Nanotube Circuits Using Electrical Breakdown." <i>Science</i> (2001); 292: 706-709.
	A15	Kim, W., et al., "Synthesis of Ultralong and High Percentage of Semiconduction Single-walled Carbon Nanotubes." <i>Nano Letters</i> (2002); Vol. 2 No. 7 703-708. Published on web 6/01/02
	A16	Liu, et al., "Organizing Single-Walled Carbon Nanotubes on Gold Using a Wet Chemical Self-Assembling Technique, <i>Langmuir</i> ," April 18, 2000, Vol. 16, No. 8, 3659-3573
	A17	Zheng et al, "Chemical Vapor Deposition Growth of Well-Aligned Carbon Nanotube Patterns on Cubic Mesoporous Silica Films by Soft Lithography", <i>Chemistry of Materials</i> , June 9, 2001, Vol. 13, 2240-2242
	A18	Huang, et al., "Patterned Growth of Well-Aligned Carbon Nanotubes: A Soft-Lithographic Approach", <i>The Journal of Physical Chemistry B</i> , March 16, 2000, Vol. 104, No. 10, 2193-2196
	A19	Chattopadhyay, et al., "Metal-Assisted Organization of Shortened Carbon Nanotubes in Monolayer and Multilayer Forest Assemblies", <i>Journal of the American Chemical Society</i> , August 28, 2001, Vol. 123, 9451-9452

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